

<b>Interview Summary</b>	<b>Application No.</b> 09/866,101	<b>Applicant(s)</b> HELLMAN ET AL.	
	<b>Examiner</b> Cam Y T. Truong	<b>Art Unit</b> 2162	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Cam Y T. Truong (Examiner). (3) \_\_\_\_.
- (2) Marc A. Berger (Attorney). (4) \_\_\_\_.

Date of Interview: 05 January 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.  
If Yes, brief description: \_\_\_\_.

Claim(s) discussed: 1-118.

Identification of prior art discussed: \_\_\_\_.

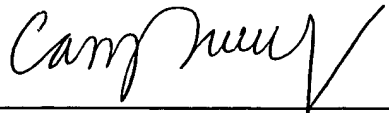
Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
\_\_\_\_\_  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Applicant's representative accepted examiner to amend claims 1, 3 and 20-26 to put the claims in condition for allowance.

The amendment is followed:

replace claims 1, 5, 8, 10-12, 30, 46, 50-51, 53, 55-57, 59, 61, 63, 68, 76, 78, 89, 93, 96, 98-100, 103, 104, 106, 111, 116, and 118;

delete claims 3, 4, 7, 9, 13, 21-24, 36-45, 48, 49, 52, 54, 58, 64-67, 79-88, 91, 92, 94, 95, 97, 101-102, 107-110.

1. (Currently amended) A distributed ontology system for responding to queries comprising:

a central computer within the distributed ontology system comprising a global ontology directory, the global ontology directory indexing class and relation definitions, wherein class definitions define ontological classes, the ontological classes being sets of instances having a common characterization, and relation definitions define ontological relations, the ontological relations being inter-relationships between classes that are used to relate instances of one or more classes;

a plurality of ontology server computers, comprising:

a corresponding plurality of repositories, each repository of the plurality of repositories containing different portions of the class and relation definitions and different portions of superclass-subclass definitions, and wherein at least one superclass-subclass definition is contained in a repository of the plurality of repositories that resides on a different ontology server computer than the ontology server computer housing the repository containing the definition of the subclass or the ontology server computer housing the repository containing the definition of the superclass; and

a corresponding plurality of query processors for responding to queries relating to the class and the relation definitions in said plurality of repositories;

an authoring tool communicating with said repositories for updating said repositories, comprising:

a validator for ensuring that updates made to said repositories maintain backward compatibility, so that expressions that were valid before being updated remain valid after said updating is performed; and

a relation editor for editing relation definitions in said repositories, by expanding domains of relations;

an Extensible Markup Language (XML) embedder communicating with said repositories for embedding an XML Schema within a designated repository by identifying class and relation definitions implicit in the XML Schema, wherein said identifying comprises user-aided choosing of class and relation definitions implicit in the XML Schema that are embedded within the designated repository; and

a computer network connecting said central computer with said plurality of ontology server computers.

5. (Currently amended) The system of claim 1 wherein at least one of said plurality of ontology server computers further comprise a publisher for publishing class and relation definitions in its repository to said global ontology directory.

8. (Currently amended) The system of claim 1 wherein said authoring tool has a capability to browse repositories of a plurality of ontology server computers.

10. (Currently amended) The system of claim 1 wherein said authoring tool further comprises a class adder for adding new class definitions to said repositories.

11. (Currently amended) The system of claim 1 wherein said authoring tool further comprises a class editor for editing class definitions in said repositories.

12. (Currently amended) The system of claim 1 wherein said authoring tool further comprises a relation adder for adding relation definitions to said repositories.

30. (Currently amended) The system of claim 29 wherein said XML generator generates an XML Schema with aid of a user choosing which class and relation definitions are to be included in the XML Schema.

46. (Currently amended) A distributed ontology method for responding to queries comprising:

providing a central computer within the distributed ontology system comprising a global ontology directory;

connecting said central computer with a plurality of ontology server computers via a computer network;

managing said global ontology directory for a distributed ontology, the global ontology directory indexing class and relation definitions, wherein class definitions define ontological classes, the ontological classes being sets of instances having a common characterization, and relation definitions define ontological relations, the ontological relations being inter-relationships between classes that are used to relate instances of one or more classes;

managing a plurality of repositories, each repository of the plurality of repositories residing on an ontology server computer of the plurality of ontology server computers, and each repository of the plurality of repositories including a different portion of the class and relation definitions and a different portion of superclass-subclass definitions, wherein at least one superclass-subclass definition resides in a different repository of the plurality of repositories than the

repository containing the definition of the subclass or the repository containing the definition of the superclass;  
 updating the repositories comprising:

validating that updates made to the repositories maintain backward compatibility, so that expressions that were valid before being updated remain valid after said updating is performed; and

editing relation definitions in the repositories, by expanding domains of relations;

communicating with the repositories for embedding an Extensible Markup Language (XML) Schema within a designated repository by identifying class and relation definitions implicit in the XML Schema, with aid of a user choosing which class and relation definitions implicit in the XML Schema are embedded within the designated repository; and

responding to queries relating to the class and the relation definitions in at least one repository of the repositories.

50. (Currently amended) The method of claim 46 further comprising publishing class and relation definitions within at least one repository to the global ontology directory.

51. (Currently amended) The method of claim 46 further comprising seeking out class and relation definitions included in the repositories.

53. (Currently amended) The method of claim 46 wherein said updating further comprises browsing a plurality of repositories.

55. (Currently amended) The method of claim 46 wherein said updating further comprises adding new class definitions to the repositories.

56. (Currently amended) The method of claim 46 wherein said updating further comprises editing class definitions in the repositories.

57. (Currently amended) The method of claim 46 wherein said updating tool further comprises adding relation definitions to the repositories.

59. (Currently amended) The method of claim 46 further comprising searching for class or relation definitions.

61. (Currently amended) The method of claim 46 wherein the class and relation definitions in the repositories include authorship data.

63. (Currently amended) The method of claim 46 further comprising embedding a text file having a description of a class within a repository.

68. (Currently amended) The method of claim 46 further comprising generating a view of a class, by associating with the class a subset of attributes of the class.

76. (Currently amended) The method of claim 46 further comprising displaying icons representing instances of classes.

78. (Currently amended) The method of claim 46 further comprising navigating through class and relation definitions.

89. (Currently amended) An ontology system for responding to queries comprising:

a central computer within a distributed ontology system comprising a global ontology directory for an ontology, the global ontology directory indexing class and relation definitions, wherein class definitions define ontological classes, the ontological classes being sets of instances having a common characterization, and relation definitions define ontological relations, the ontological relations being inter-relationships between classes that are used to relate instances of one or more classes;

a computer network connecting said central computer with a plurality of ontology server computers;

said plurality of ontology server computers comprising:

a plurality of repositories, each repository including a different portion of the class and relation definitions and a different portion of superclass-subclass definitions, wherein at least one superclass-subclass definition resides in a different repository of the plurality of repositories than the repository containing the definition of the subclass or the repository containing the definition of the superclass;

an authoring tool for updating said repositories, comprising:

a validator for ensuring that updates made to said repositories maintain backward compatibility, so that expressions that were valid before being updated remain valid after said updating is performed; and

a relation editor for editing relation definitions in said repositories, by expanding domains of relations;

an Extensible Markup Language (XML) embedder communicating with said repositories for embedding an XML Schema within a designated repository with aid of a user choosing class and relation definitions implicit in the XML Schema that are embedded within the designated repository;

an agent for seeking out class and relation definitions included in said repositories; and

a query processor for responding to queries relating to the class and the relation definitions in said repositories.

93. (Currently amended) The system of claim 89 further comprising a publisher for publishing class and relation definitions within at least one of said repositories to said global ontology directory.

96. (Currently amended) The system of claim 89 wherein said authoring tool has a capability to browse a plurality of repositories.

98. (Currently amended) The system of claim 89 wherein said authoring tool further comprises a class adder for adding new class definitions to said repositories.

99. (Currently amended) The system of claim 89 wherein said authoring tool further comprises a class editor for

editing class definitions in said repositories.

100. (Currently amended) The system of claim 89 wherein said authoring tool further comprises a relation adder for adding relation definitions to said repositories.

103. (Currently amended) The system of claim 89 further comprising an ontology toolkit comprising:  
a search tool, for searching said global ontology directory; and  
a query tool for querying at least one of said plurality of repositories.

104. (Currently amended) The system of claim 89 wherein the class and relation definitions in said repository include authorship data.

106. (Currently amended) The system of claim 89 further comprising a text file embedder for embedding a text file having a description of a class within a repository.

111. (Currently amended) The system of claim 89 further comprising a view generator for generating a tree of attributes from class and relation definitions.

116. (Currently amended) The system of claim 89 further comprising a graphical user interface including icons for displaying instances of classes.

118. (Currently amended) The system of claim 89 further comprising an ontology navigation tool for viewing class and relation definitions.